

120

MOTOR GRADER



Engine Power
Operating Weight

85-129 kW (114-173 hp)
16 556 kg / 36,500 lb

Cat® C7.1 engine meets Brazil MAR-1, equivalent to U.S. EPA Tier 3 / EU Stage IIIA emission standards.



The Next Generation **Cat**® 120 Motor Grader combines AWD power, joystick or steering controls, and advanced grade control technology for optimal precision. Comfort cab and integrated features make it ideal for site preparation.

THE CAT® 120

THE NEXT GENERATION



GRADING THE ROAD AHEAD

The Cat 120 Motor Grader offers you machine options to power through any job with the utmost performance.

- + INCREASED FUEL ECONOMY USING ECO MODE.
- + NEXT GENERATION CAB OPTIONS FOR MAXIMUM COMFORT
- + SPEND LESS TIME AND MONEY ON REGULAR MAINTENANCE



WORK MORE... FUEL LESS

Get savings using Eco mode



SCENARIO:

COMPARED TO NOT USING ECO MODE

BETTER FUEL ECONOMY¹

Use less fuel with Eco mode.

CAB DESIGNED FOR MAXIMUM COMFORT

The next generation cab gives you comfort options to promote productivity.

SPEND LESS TIME AND MONEY ON REGULAR MAINTENANCE¹

Extend your maintenance intervals using new filtration technology. Filters are grouped together for easy access.

¹ Compared to previous model.

REAL-TIME INFORMATION FROM CAT EQUIPMENT MANAGEMENT TAKES THE GUESSWORK OUT OF MANAGING YOUR EQUIPMENT

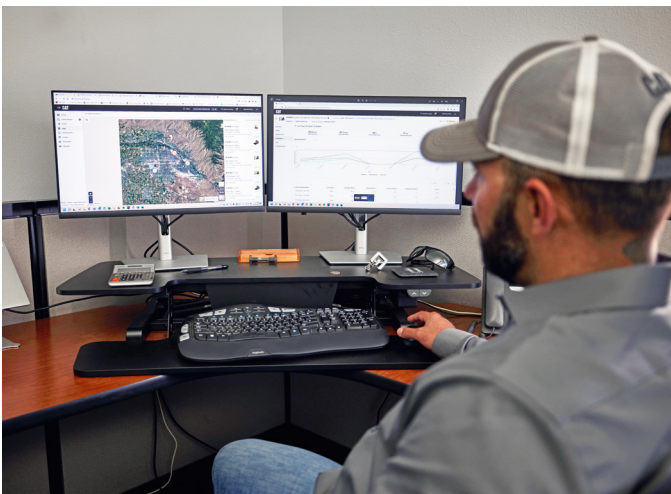
Cat Equipment Management technologies work together to put equipment information at your fingertips. Get real-time access to information on every machine in your fleet on any jobsite – no matter the size of the operation or the brands of equipment you run.



VISIONLINK™

Gather and summarize machine telematics and jobsite data from all your equipment – regardless of the manufacturer.* View actionable information such as idle time, fuel burn, location, total cycles, and more to improve machine efficiency, productivity, and utilization. Access data anywhere via a mobile, tablet, or desktop device – on or off the jobsite.

*Data field availability can vary by equipment manufacturer. VisionLink subscription required. Availability may vary by region. Consult your Cat dealer for more details.



CAT REMOTE SERVICES*

A suite of technologies that improve your jobsite efficiency.

- + Remote Troubleshoot allows your Cat dealer to perform diagnostic testing on your connected machine remotely, pinpointing potential issues while the machine is in operation. Remote troubleshooting helps to ensure the technician arrives with the correct parts and tools the first time, eliminating additional trips, to save you time and money.
- + Remote Flash allows you to update onboard software without a technician being present, allowing you to initiate software updates when convenient, increasing your overall operating efficiency.
- + Operator ID requires operators to log in via Passcode or Bluetooth® (Cat Key Fob) at machine startup, helping to deter theft, vandalism, and unauthorized use. It saves settings from the last time an operator was logged in and maintains profiles that were retained during machine software flash updates. Operator IDs are easily managed through the touchscreen and can also be managed remotely and uploaded to the machine through Visionlink.

*Must be within cell range coverage.



CAT INSPECT

Cat Inspect is a mobile application that allows you to easily perform digital preventative maintenance checks, inspections, and daily walkarounds. The app includes machine-specific Preventive Maintenance (PM) checklists to perform service intervals as recommended in the Operation and Maintenance Manual. Inspections can easily be integrated with other Cat data systems like VisionLink, so you can keep a close eye on your fleet.

LOWER REGULAR MAINTENANCE COSTS



NEXT GENERATION FILTERS

New filtration system makes changing filters a breeze. The filters inside the cartridge are replaced instead of the entire canister to save costs.

LONGER SERVICE INTERVALS

Reduce your typical operating expenses with extended engine oil, hydraulic, and transmission filter change cycles. The new filters last longer to keep your motor grader active on the jobsite.

GROUPED LOCATION

Service your machine faster with the filters in a central location. Filters are grouped together for easy access so you can do preventative maintenance quickly and move on to the next task.

CONTROL OPTIONS

Get the job done with a choice of joysticks or steering wheel and lever controls. Integrated technology options put more productivity at your fingertips.

IMPROVED VENTILATION

The ISO-certified rollover protective structure (ROPS) cab is pressurized to lock out noise. The heating and cooling system keeps you at your ideal temperature throughout the day.

MULTIPLE CAB OPTIONS

Your cab is like your office. Choose the options that you want to work comfortably, like adjustable seats. Heated/cooled seat options are available.

GROUND-UP REDESIGN

NEXT GENERATION COMFORT





EASY ON AND OFF

Work safely using three points of contact when entering and exiting the machine with strategically placed walkways and grab rails.



EXTRAORDINARY VISIBILITY

View your jobsite through connecting glass windows, rear- and side-view mirrors. Rearview camera option offers a wide view of the back of the machine for better visibility.



STOP SAFELY

If the engine stalls or main pump pressure drops, the secondary steering system¹ automatically activates to help you steer safely to a stop.



CONVENIENT SETTINGS

The touchscreen display makes navigation easy and keeps things running smoothly.

¹ Secondary steering system is standard for JOY and optional for LVR.

SEE YOUR INVESTMENT GO FURTHER DESIGNED TO LAST

MAXIMIZE COMPONENT LIFE

Reduce daily greasing requirements and costly repairs to your circle and pinion with the Circle Saver option. The grease fitting is easy to access and maintain.

REDUCE DAMAGE

Keep your machine running smoothly in demanding applications with optional guarding. Guards defend against potential damage to your transmission, filter, front axles, and window guards.

LESS TIME. LOWER COST.

Keep the circle moldboard tight for accurate grading. Durable components and adjustable wear inserts reduce service time.

PRESERVE YOUR MACHINE

The standard circle drive slip clutch protects your pinion and circle teeth from potential damage.

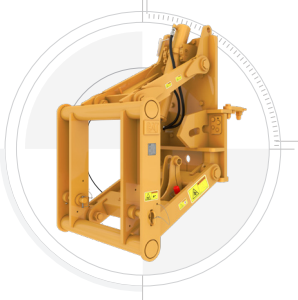


INCREASE YOUR PRODUCTIVITY AND PROFIT

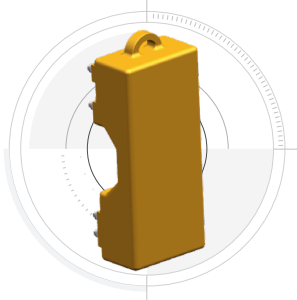
CAT ATTACHMENTS

You can easily expand the performance of your machine by utilizing the variety of Cat attachments available for motor graders. Each Cat attachment is designed to fit the weight and horsepower of your machine for improved performance, safety, and stability.

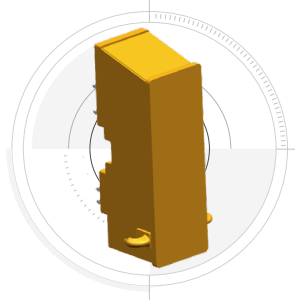
LIFT GROUPS



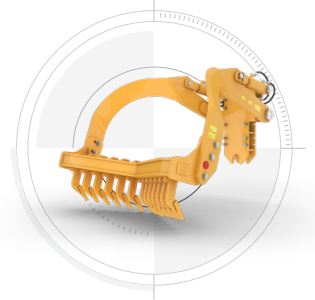
COUNTERWEIGHT



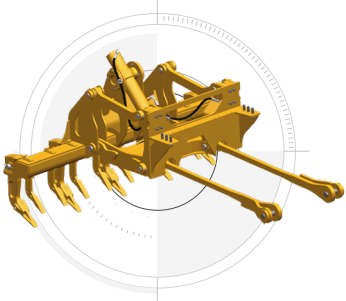
PUSHBLOCK



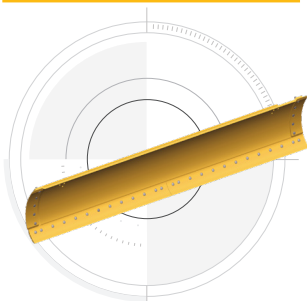
MID-MACHINE SCARIFIER



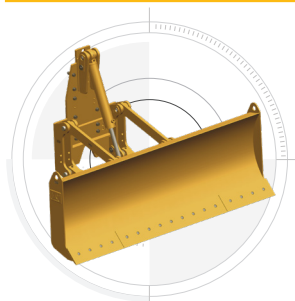
REAR RIPPER/SCARIFIER



MOLDBOARDS



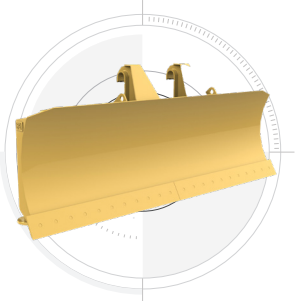
FRONT BLADE



V-PLOW



STRAIGHT PLOW



BROOMS¹



¹ JOY configuration only.

TECHNICAL SPECIFICATIONS

See cat.com for complete specifications.

POWERTRAIN		
Engine Model	Cat® C7.1	
Emissions	Meets Brazil MAR-1, equivalent to U.S. EPA Tier 3 / EU Stage IIIA emission standards.	
Net Engine Power Range (Tandem) ISO 9249	85 - 129 kW 114 - 173 hp	
Net Engine Power Range (AWD) ISO 9249	84 - 129 kW 113 - 173 hp	
Displacement	7.01 L	1.9 gal
Bore	105 mm	4.1 in
Stroke	135 mm	5.3 in
Torque Rise (Tandem)	29%	
Torque Rise (AWD)	28%	
Maximum Torque	822 N•m	606 lbf-ft
Engine RPM	2,000 rpm	
Number of Cylinders	6	
<ul style="list-style-type: none"> • Advertised power is tested per the specified standard in effect at the time of manufacture. • Net power available at the flywheel when the engine is equipped with fan, air cleaner, aftertreatment, and alternator with engine speed at 2,000 rpm. 		
WEIGHT		
Weight, Typically Equipped (LVR Configuration)	16 556 kg	36,500 lb
Front Axle	4718 kg	10,401 lb
Rear Axle	16 556 kg	36,500 lb
Weight, Typically Equipped (JOY Configuration)	14 247 kg	31,409 lb
Front Axle	3796 kg	8,369 lb
Rear Axle	10 451 kg	23,041 lb
AIR CONDITIONING SYSTEM		
<p>The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a or R1234yf. Refer to the machine labeling for identification of the gas.</p> <ul style="list-style-type: none"> – If equipped with R134a (Global Warming Potential = 1430), the system contains 1.6 kg (3.5 lb) of refrigerant which has a CO₂ equivalent of 2.288 metric tonnes (2.521 tons). 		

SERVICE REFILL CAPACITIES		
Standard Circle Drive	7 L	1.8 gal
Cooling System (LVR Configuration)	53 L	14.0 gal
Cooling System (JOY Configuration)	49 L	12.9 gal
Engine Crankcase	18 L	4.8 gal
Fuel Tank	246 L	65.0 gal
Hydraulic System (Non-AWD) (LVR Configuration)	94 L	24.8 gal
Hydraulic System (AWD) (LVR Configuration)	124 L	32.8 gal
Hydraulic System (Non-AWD) (JOY Configuration)	75 L	19.8 gal
Hydraulic System (AWD) (JOY Configuration)	75 L	19.8 gal
Tandem Housing (each)	60 L	15.9 gal
Transmission and Differential	64 L	16.9 gal
MOLDBOARD		
Height	490 mm	19.3 in
Width	3556 mm	12 ft
Thickness	22 mm	0.9 in
Arc Radius	413 mm	16.3 in
Throat Clearance	105 mm	4.1 in
BLADE RANGE		
Circle Center Shift		
Left	656 mm	25.8 in
Right	656 mm	25.8 in
Moldboard Side Shift with 17.5/R25 tires		
Left	512 mm	20.2 in
Right	663 mm	26.1 in
Maximum Shoulder Reach Outside of Tires		
Left	141 mm	5.6 in
Right	1579 mm	62.2 in
Maximum Blade Tip		
Forward	40°	
Rear	5°	

STANDARD AND OPTIONAL EQUIPMENT

Standard and optional equipment may vary. Consult your Cat® dealer for details.

POWERTRAIN	STANDARD	OPTIONAL
Cat® C7.1 Engine	•	
Eco Mode	•	
50°C (122°F) Ambient Capacity	•	
Engine Idle Shutdown Timer	•	
Differential Lock	•	
Hydraulic Demand Fan	•	
CAB	STANDARD	OPTIONAL
ROPS/FOPS		•
Mechanical Suspension Seat	•	
Air Suspension Adjustable Seat		•
Canopy Cab		•
Touchscreen Display	•	
Standard Information Display	•	
Adjustable Control Console (Levers)	•	
Entertainment Radio Ready	•	
Halogen Lighting	•	
LED Lighting		•
USB/Auxiliary Radio		•
CAT TECHNOLOGY	STANDARD	OPTIONAL
VisionLink™		•
Remote Services		•

DRAWBAR CIRCLE MOLDBOARD	STANDARD	OPTIONAL
Blade Lift Accumulators		•
Circle Drive Slip Clutch	•	
Circle Saver		•
Cutting Edges		•
Grader Bits		•
Moldboard 12 ft	•	
Moldboard 14 ft		•
Standard Drawbar Circle Moldboard	•	
Top Adjust Drawbar Circle Moldboard		•
SAFETY AND SECURITY	STANDARD	OPTIONAL
Rearview Mirror	•	
Side-view Mirror	•	
Signaling/Warning Horn	•	
Secondary Steering System (JOY)	•	
Secondary Steering System (LVR)		•
Rearview Camera		•
Hydraulic Brakes	•	
Seat Belt	•	
SERVICE AND MAINTENANCE	STANDARD	OPTIONAL
Grouped Location for Engine Oil and Fuel Filters	•	
Extended Life Coolant	•	
Ground-Level Fuel Fill		•
Reversing Fan		•
ATTACHMENTS	STANDARD	OPTIONAL
Lift Groups		•
Broom (JOY)		•
Counterweight		•
Front Blade		•
Heavy Duty Ripper		•
Mid-machine Scarifier		•
Push Block		•
Rear Ripper/Scarifier		•
Straight Plow		•
V-Plow		•



AEXQ4464-00 (01-2026)
LVR Build Number: 15A
JOY Build Number: 14A
(S Am, Aus-NZ, India,
Indonesia, SE Asia)

For more complete information on Cat products, dealer services and industry solutions, visit us on the web at www.cat.com.

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Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

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